

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- 5 1. A computer screen capture method consists of the following steps:
- a) capturing screen data representative of a selected area, being the whole or part of said computer screen, at predetermined capture intervals including the capture of the whole of said selected area of said screen at the beginning of this process;
- 10 b) comparison of each successive captured screen data with the immediately preceding captured screen data to determine the area of the screen that changes for each of said one or more predetermined areas of said selected area;
- 15 c) creation of an event list having an event interval at least equal to or less than the said predetermined capture interval containing none, one or more entries per interval, wherein said entries may be one or more of a unique reference to events representing visual change associated with said captured screen data;
- 20 d) recreation of previous and successive of said one or more areas of said selected areas by reference to associated events in said event list;
- e) comparison of recreated previous and successive of said one or more areas to determine the minimum area of change and storing said minimum area or areas; and
- 25 f) creation of a file containing at least said first whole selected area and said minimum stored areas, and an event list representing changes over time of said selected area of a computer screen.
2. A computer screen capture method in accordance to claim 1 wherein between steps e) and f) there is a further step of:
- 30 e') comparing minimum stored areas and discarding multiple copies of said minimum stored areas and maintaining a store of unique minimum areas

and adding to said event list a reference to said unique minimum areas for each respective associated event interval.

- 5 3. A computer screen capture method in accordance to claim 1 wherein in addition to step a) complete representations of said selected area are stored at predetermined storage intervals.
- 10 4. A computer screen capture method in accordance to claim 1 includes the further step of:
- 15 a) obtaining cursor image data that is obtained via an application programming interface call;
- b) storing said cursor image data regarding said application programming interface calls and creating a reference to said data in said event list including the position of said cursor relative to said selected area.
5. A computer screen capture method in accordance to claim 4 includes the further step of:
- 20 i) determining the position of a said cursor by reference to a hot spot and the position of said hot spot relative to said selected area and associating a event list entry therewith.
6. A computer screen capture method in accordance to claim 4 includes the further step of:
- 25 j) storing an image of said cursor.
7. A computer screen capture method in accordance to claim 6 wherein said cursor image is stored as a transparent bit map image.
- 30 8. A computer screen capture method in accordance with any preceding claim including the further step:

j) compressing said minimum stored areas before communicating said minimum stored areas over a computer network.

- 5 9. A computer screen capture method in accordance with any preceding claim wherein said event list is compressed before sending said event list over a computer network.
- 10 10. A computer screen capture method in accordance with any preceding claim wherein said steps are performed on the fly.
11. A computer screen capture method in accordance with claims 1 to 9 wherein any step following step a) is performed after all storage steps have ceased.
- 15 12. A computer screen capture method in accordance with claim 1 further comprising the step of:
- k) a user of said computer screen capture method adding one or more instructional objects to one or more captured screen data.
- 20 13. A computer screen capture method in accordance with claim 12 wherein one or more of said added objects of an image are added using vector representation.
14. A computer screen capture method in accordance with claim 12 wherein one or more of said added objects of audio are added using a compressed audio file.
- 25 15. A computer screen capture method in accordance with claim 12 wherein one or more of said added objects include a pause that is conditional on the action of the recipient of said captured screen data.

16. A computer screen capture method in accordance with claim 9 wherein said compressed files are communicated to a WEB server for storage and streaming to a recipient upon demand.

5

17. A computer screen playback method for playback of a computer screen captured in accordance with the method defined herein comprising the following steps:

- c) receiving and uncompressing said compressed files;
- 10 d) displaying the whole of said selected area of said computer screen; and
- e) overlaying on to said display said one or more minimum areas of change as and when said change occurs in sequence as stored.

18. A computer screen playback method in accordance with claim 17 wherein
15 playback of said captured screen data includes the further step of:

- f) a user choosing to replay said captured screen from a predetermined capture interval;
- g) said playback steps beginning from said first stored selected area and being displayed to said user after said predetermined capture interval is
20 reached.

19. A computer screen playback method in accordance with claim 17 wherein playback of said cursor motion replacing step e) with the step of:

- e') said playback steps beginning from the closest in time complete
25 representation of said stored selected area to said predetermined capture interval.

20. A computer screen playback method in accordance with claim 17 wherein playback of said cursor motion includes the step of:

- h) interpolating the position of a said cursor for positions between cursor
30 capture intervals; and displaying said cursor on a said overlay more often than the screen is overlay is updated with said minimum areas.

21. A computer screen capture method in accordance to claim 20 wherein when said cursor position is interpolated and if the amount of interpolated movement between display positions of said cursor is less than twice the maximum linear dimension of the cursor icon dimension, an area of the current display screen that is less than twice the area of the cursor dimension is stored separately such that successive movement of the cursor between displayed positions uses said separately stored screen area to overlay said then current screen.

22. An apparatus for computer screen capture and replay comprising:
one or more computers each including a display screen, processor and user input device for at least one of said computers for delineating an area of a said respective display screen to capture;

instructions for capturing screen data at predetermined capture intervals of said delineated area the first such capture including a representation of the whole of said delineated area of a said display screen;

instructions for comparison of each successive captured screen data with the immediately preceding captured screen data to determine the area of the screen changes for each of said one or more predetermined areas of the selected area;

instructions for creation of an event list having an event interval at least equal to or less than the said predetermined capture interval containing none, one or more entries per interval, wherein said entries may be one or more of a unique reference to events representing visual change associated with said captured screen data;

instructions for recreation of a previous and successive of said one or more areas of the selected area by reference to associated events in the event list;

instructions for comparison of recreated previous and successive of said one or more areas to determine the minimum area of change and storing said minimum area or areas; and

instructions for creation of a file containing at least said first whole selected area and said minimum stored areas, and an event list representing changes over time of said selected area of a computer screen.

5

23. A computer-readable media for computer screen capture for creating a presentation, the computer including a display screen, processor and user input device for delineating an area of said display screen to capture, the computer-readable media comprising:

10 instructions for capturing screen data at predetermined capture intervals of said delineated area the first such capture including a representation of the whole of said delineated area;

instructions for comparison of each successive captured screen data with the immediately preceding captured screen data to determine the area of the screen
15 changes for each of said one or more predetermined areas of the selected area;

instructions for creation of an event list having an event interval at least equal to or less than the said predetermined capture interval containing none, one or more entries per interval, wherein said entries may be one or more of a unique reference to events representing visual change associated with said captured screen data;

20 instructions for recreation of a previous and successive of said one or more areas of the selected area by reference to associated events in the event list;

instructions for comparison of recreated previous and successive of said one or more areas to determine the minimum area of change and storing said minimum area or areas; and

25 instructions for creation of a file containing at least said first whole selected area and said minimum stored areas, and an event list representing changes over time of said selected area of a computer screen.